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LaBombard

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(54) **SELF CLOSING TISSUE FASTENER**

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See application file for complete search history.

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(57) **ABSTRACT**

A self-closing tissue fastener for use in wound closure and surgery has, in an annular configuration, a central ring; tissue-piercing spines projecting from a first side of the ring; and stabilizing members projecting from a second side of the ring. The fastener can be carried on the inside of a tube, where it is stable without additional restraint, as well as on the outside of a tube or mandrel. The device can be compressed from a planar state, as fabricated, to the annular state by compressing the stabilizers (or, if they are on the outside in the planar form, the barbs). Unlike present devices, which are not as stable in the annular state, the inventive device and an applicator therefore provide an open channel to a site of surgery, for passage of endoscopes or various endoscopic and similar instruments. In particular, the fastener can be delivered under endoscopic monitoring.

21 Claims, 11 Drawing Sheets